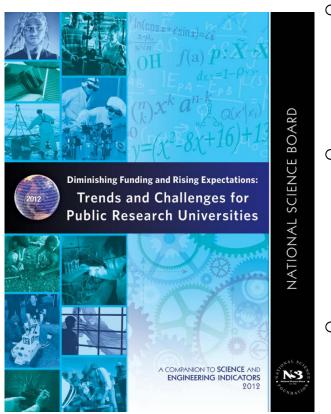
Trends and Challenges for Public Research Universities



- Institutional funds from universities and colleges comprise the second largest source of funding for academic R&D, accounting for \$11.2 billion of the \$54.9 billion of academic spending on S&E R&D in 2009.
- Since 1991, the overall share of university support for research has remained stable. However, the actual costs to institutions during this period have increased threefold in current dollars, with compliance costs representing a large component.
- Institutional funds are directed toward institutionally financed research expenditures, including infrastructure, such as buildings, laboratories, field stations, facility renovation, cyberinfrastructure, and unrecovered indirect costs and federally mandated cost sharing.

Observations from the National Science Board

- A continued decline in state support will negatively impact the ability of these universities to provide quality education and training to a diverse student body and attract and retain the talent needed to maintain the scope and quality of their research efforts.
- Increased enrollment in higher education is projected to come mainly from traditionally underrepresented minority groups. While enrollment at public research universities has continued to increase, a greater share of students, particularly minorities, are attending public 2-year or private for-profit institutions.
- Reductions in revenue of public research universities and gaps in salary between public and private research universities have the potential to lead to an outflow of talent at public research universities and reduced research capacity. These could result in greater concentration of talent and R&D in fewer geographical locations, and at fewer universities, with smaller and less diverse student bodies. This could have a substantial impact on economic and workforce development at the local, state, and national levels.

Figure 8-29
State funding for major public research universities per enrolled student: 2010

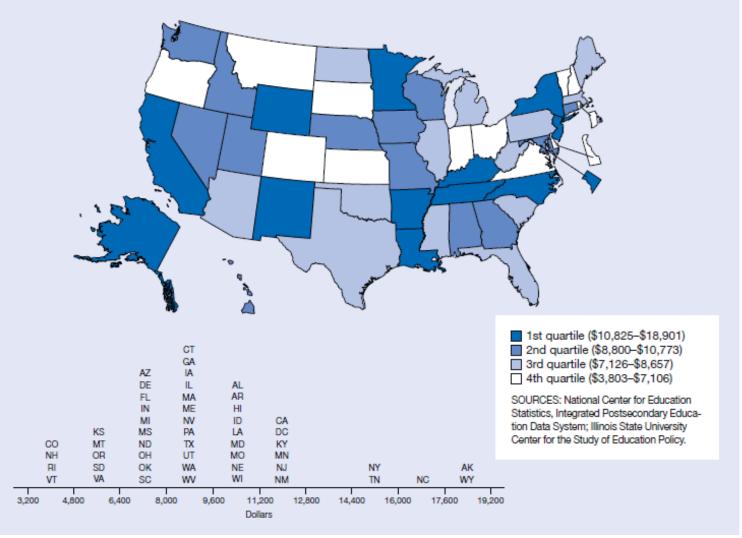


Figure 8-27
Appropriations of state tax funds for operating expenses of higher education as a percentage of gross domestic product: 2010

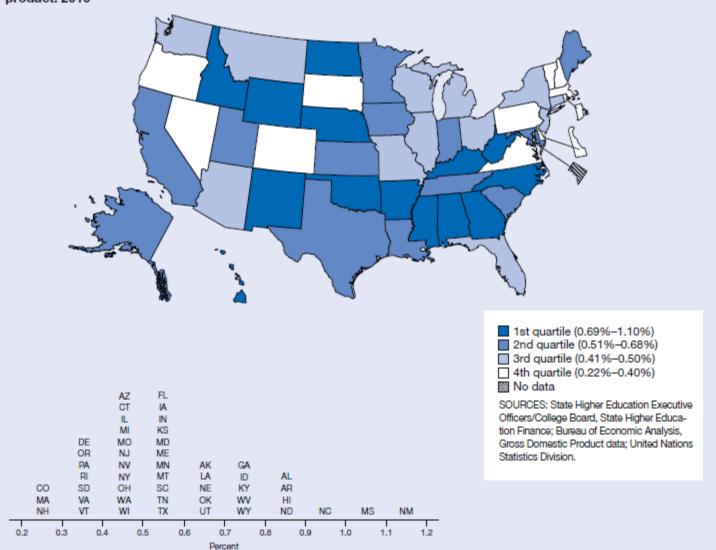
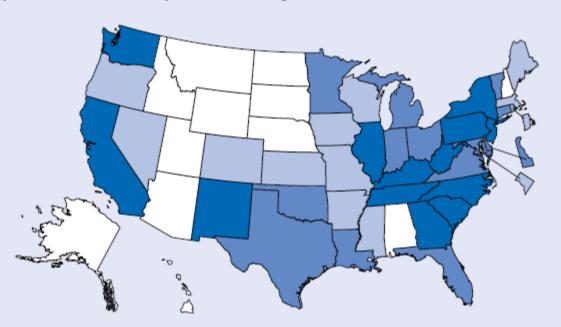
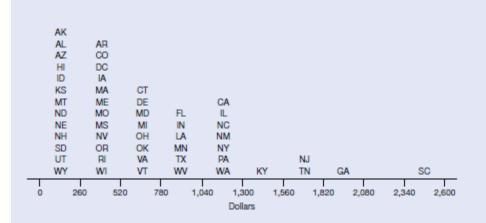


Figure 8-28
State expenditures on student aid per full-time undergraduate student: 2008





- 1st quartile (\$988-\$2,577)2nd quartile (\$585-\$980)
- 3rd quartile (\$200–\$503)
- 4th quartile (\$12-\$191)

SOURCES: National Association of State Student Grant and Aid Programs, Annual Survey Report; National Center for Education Statistics, Integrated Postsecondary Education Data System.

Figure 8-52 High-technology establishments as a percentage of all business establishments: 2008

